

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0124036; AI 155751; PER20080002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Joe's Septic Contractors, Inc.
P.O. Box 336
Cut Off, LA 70345
- II. **PREPARED BY:** Eura DeHart
- DATE PREPARED:** July 1, 2008
- III. **PERMIT ACTION:** Issue LPDES permit LA0124036, AI 155751; PER20080002

LPDES application received: March 17, 2008

EPA has not retained enforcement authority.

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated wastewater from the processing of sewage sludge by Joe's Septic Contractors, Inc. The facility will receive sewage sludge (including but not limited to domestic septage and port-o-let wastes) via pump trucks into a 10,000 gpd mechanical treatment plant. The wastewater from the treatment plant will undergo further treatment in a 3-cell oxidation pond prior to final discharge. The solids will be stored for a maximum of six months prior to disposal at a permitted landfill.
- B. The facility is located at 15344 Highway 3235 in Cut Off, Lafourche Parish.
- C. The treatment facility consists of a 10,000 GPD extended aeration sewage treatment plant followed by a 3-cell oxidation pond.
- D. Outfall 001
- | | |
|---------------------|---|
| Discharge Location: | Latitude 29° 30' 14" North
Longitude 90° 20' 29" West |
| Description: | treated wastewater generated by the processing of sewage sludge |
| Estimated Flow: | 0.003 MGD |

Statement of Basis

LA0124036; AI 155751; PER20080002

Page 2

V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into the Forty Arpent Canal, thence into Bayou Blue in segment 120606 of the Terrebonne Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 120606 of the Terrebonne Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 120606	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 120606 of the Terrebonne Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120606 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge will be from a new facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated May 13, 2008 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response, dated May 20, 2008 stated that the facility as proposed will have no potential effects.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Statement of Basis

LA0124036; AI 155751; PER20080002

Page 3

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 120606, Bayou Blue, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 120606 was previously listed as impaired for nutrients (nitrate + nitrite as N), organic enrichment/low DO, pathogen indicators, and phosphorus, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The facility is physically located within the geographical constraints of subsegment 120606. The facility is located within the South Lafourche Levee District hurricane protection levee and discharges to the Forty Arpent Canal. The water from the Forty Arpent Canal is pumped over the hurricane protection levee into Bayou Blue when warranted by high water levels in the Forty Arpent Canal. Thus, Bayou Blue is not impacted by the facility as a discharge to Bayou Blue will occur only during non-critical, high flow conditions (i.e. during rain events).

The following TMDL's have been established for subsegment 120606:

TMDLs for Dissolved Oxygen and Nutrients in Bayou Blue in the Terrebonne Basin, LA

The model projection indicated that the current dissolved oxygen criterion is inappropriate because it cannot be met without reductions of the natural background load, which is practically difficult to achieve.

The naturally occurring range of nitrogen-phosphorus ratios shall be maintained. To establish the appropriate range of ratios and compensate for natural seasonal fluctuations, the administrative authority will use site-specific studies to establish limits for nutrients.

A draft UAA for the Terrebonne Basin has been completed for evaluation and possibly revision to the existing dissolved oxygen criterion and reassessment of the dissolved oxygen and nutrient impairments of the waterbody.

LDEQ's position on nutrients, as supported by the ruling in *Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a BOD₅ limitation. Compliance with the BOD₅ limitation as the indicator parameter will result in the control of nutrients from

Statement of Basis

LA0124036; AI 155751; PER20080002

Page 4

the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with Part I of the permit in addition to LDEQs ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Part II of the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

TMDLs for Fecal Coliform Bacteria, Cl, SO₄, TDS, Sedimentation, TSS & Turbidity for Selected Subsegments in the Terrebonne Basin, LA

Per the TMDL, Subsegment 120606 is impaired for fecal coliforms only. Per the TMDL, "LDEQ's policy is to set wastewater permit limits no higher than water quality criteria (i.e. criteria are met at end-of-pipe). As long as point source discharges of treated wastewater contain parameter levels at or below these permit limits, they should not be a cause of exceedances of the fecal coliform bacteria water quality criteria. Therefore, no change in the permit limits is required."

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	30 mg/l	45 mg/l	Limits are set through BPJ and are consistent with the Statewide Sanitary Effluent Limitations Policy (SSELP) for sewage treatment facilities of this size.
TSS	90 mg/l	135 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Statement of Basis

LA0124036, AI 155751, PER20080002

Page 5

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Priority Pollutants Threshold Values

This Office has established the following list of priority pollutants with threshold limits intended as action levels. Should a substance exceed the established threshold limit, the permittee shall notify the Office of Environmental Compliance of the exceedence, in writing, within five (5) days. At this time, the facility shall institute a study to determine the source of the substance. Within sixty (60) days of written notification the permittee shall submit a written account of the nature of the study and the measures being taken to secure abatement. Failure to comply with any provision of this paragraph shall constitute a violation of this permit. The Department reserves the right to establish effluent limitations for any of the parameters listed below based upon the results of submitted analyses.

a. 40 CFR Part 136 Analytical Requirements

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 (in its entirety as per LAC 33:IX.2531, Subchapter N, Adoption by Reference) in effect on the effective date of this permit. Appendices A, B, and C to Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated after the effective date of this permit shall supersede these requirement as applicable.

The permittee may use other EPA approved test methods that provide more sensitive test results than those referenced in the permit.

b. If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used as the test result for those parameters.

Statement of Basis
 LA0124036; AI 155751; PER20080002
 Page 6

c. Priority Pollutant List

Pollutant	Threshold Limit (ug/l)	MLL Required (ug/l)
Total Arsenic	100	10
Total Cadmium	100	1
Total Copper	500	10
Total Lead	150	5
Total Mercury	10	0.2
Total Molybdenum	50	10
Total Nickel (freshwater)	500	40
Total Selenium	100	2
Total Zinc	500	20

X. PREVIOUS PERMITS:

No previous permits have been issued for the facility.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates no inspections have been conducted at the facility.

B) Compliance and/or Administrative Orders

A review of the files indicates no enforcement actions have been administered against this facility.

C) DMR Review

A review of the files revealed that a DMR for April 2008 was submitted indicating no discharge.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or

Statement of Basis

LA0124036; AI 155751; PER20080002

Page 7

- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for this type of facility.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	1/month	Estimate
BOD ₅	1/quarter	Grab
Total Suspended Solids	1/quarter	Grab
Fecal Coliform Bacteria	1/quarter	Grab
pH	1/quarter	Grab
Priority Pollutants	1/6 months	Grab

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a new permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Joe's Septic Contractors, Inc., Joe's Septic Contractors, Inc., March 17, 2008.